SCHEMATIC DIAGRAM

MODEL : 32A32 Chassis No. TAC0245

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON THE MANUAL FOR THIS MODEL.

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on the MANUAL for this model. Do not degrade the safety of the receiver through improper servicing.

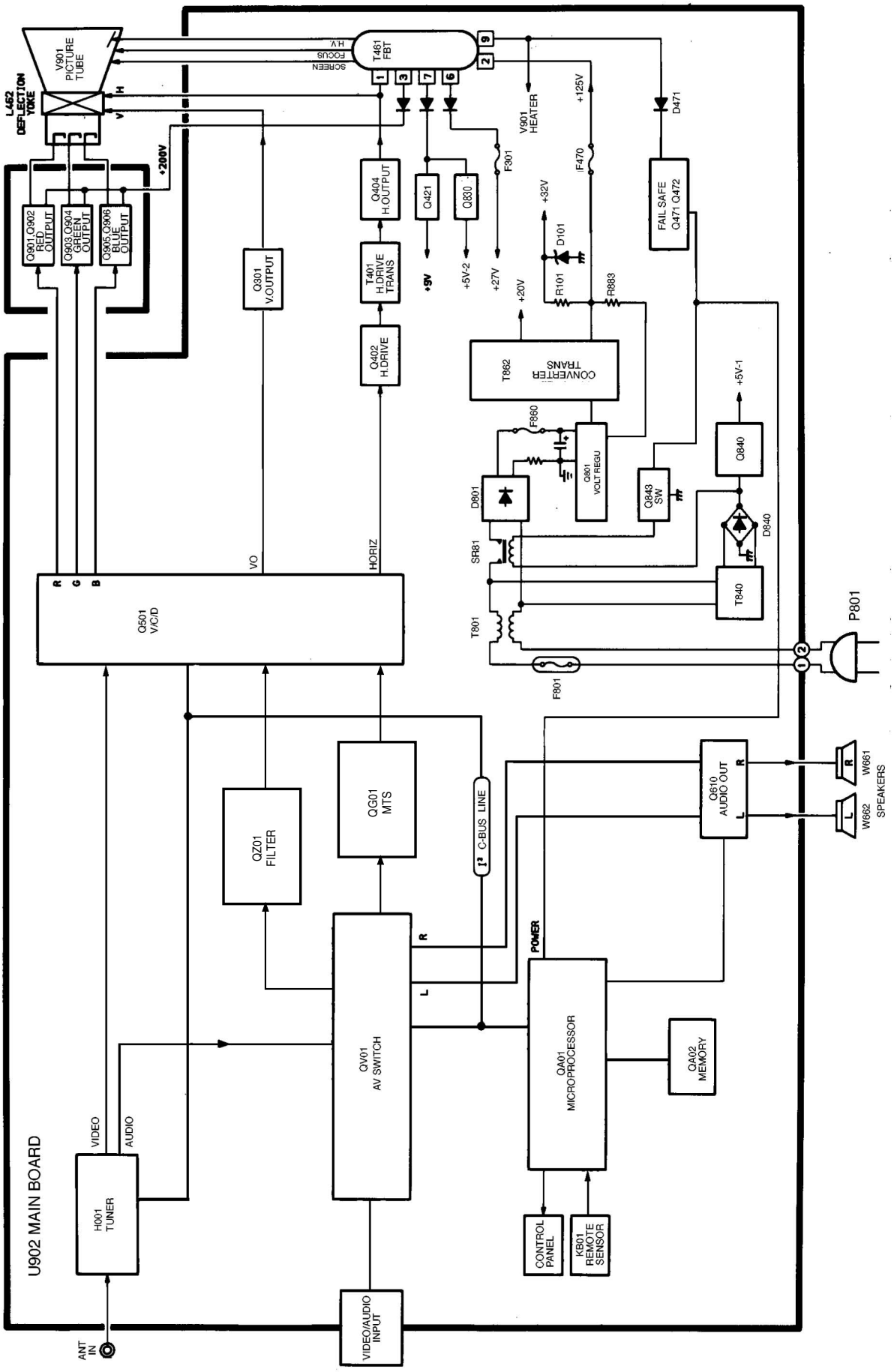
NOTE:

1. RESISTOR Resistance is shown in ohm [K = 1.000, M = 1.000.000]. All resistors are 1/6W and 5% tolerance carbon resistor, unless otherwise noted as the following marks.
   1/2R = Metal or Metal oxide of 1/2 watt 1/2S = Carbon compsistion of 1/2 watt
   1RF = Fuse resistor of 1 watt 10W = Cement of 10 watt
   K = ±10% G = ±2% F = ±1%
2. CAPACITOR Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in μF, and the values more than 1 in pF.
   All capacitors are ceramic 50V, unless otherwise noted as the following marks.
   Electolytic capacitor Mylar capacitor
3. The parts indicated with " ⚠ " have special characteristics, and should be replaced with identical parts only.
4. Voltages read with DIGITAL MULTI-METER from point indicated to chassing ground, using a color bar signal with all controls at normal, line voltage 120 volts.
5. Waveforms are taken receiving color bar signal with enough sensitivity.
6. Voltage reading shown are nominal values and may vary ±20% except H.V.

■ **SCHEMATIC DIAGRAM STRUCTURE:**

- MAIN Circuit
- CRT-D Circuit
- FRONT AV Circuit

CIRCUIT BLOCK DIAGRAM

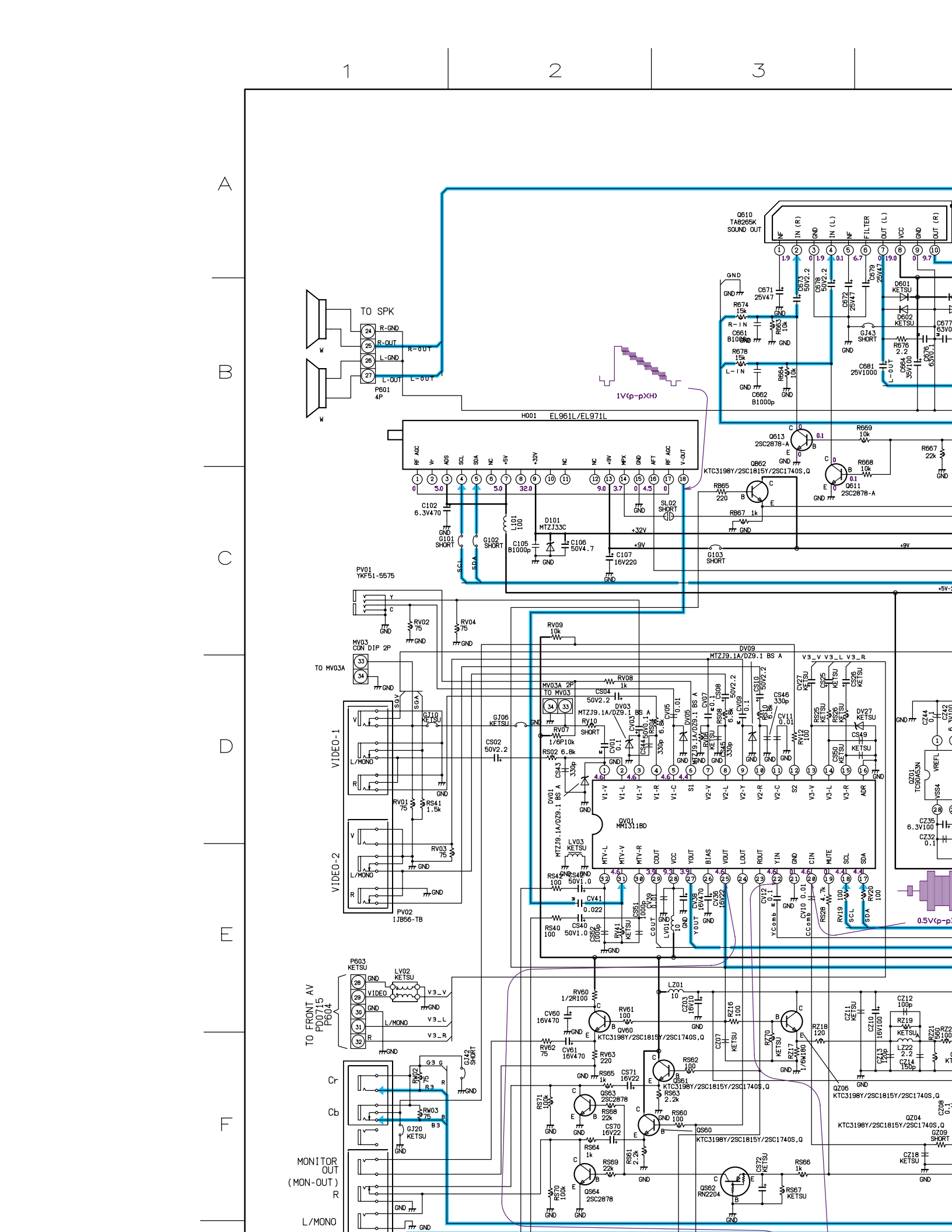


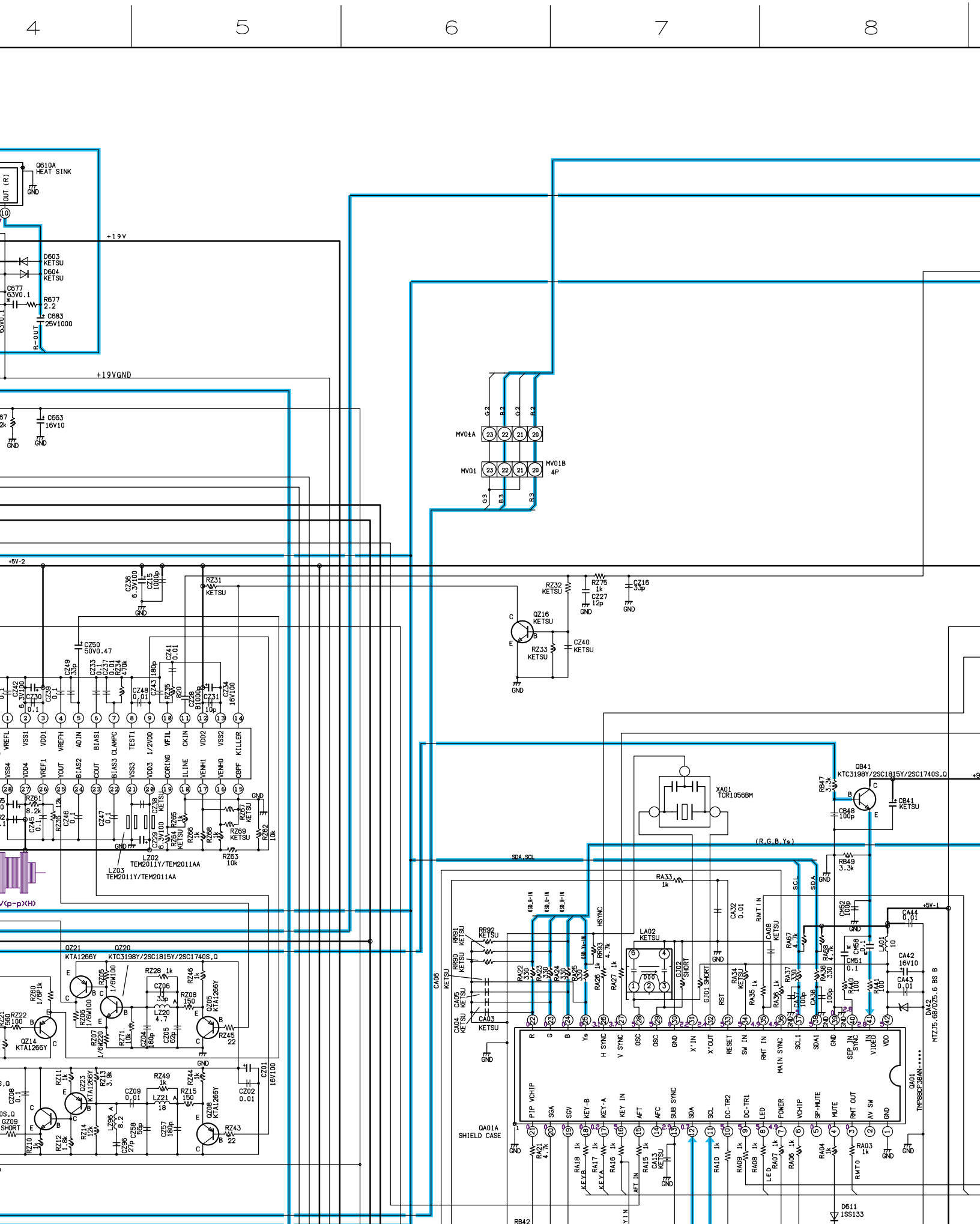
U902 MAIN UNIT PD0628A---32A32
PD0628B---36A42
PD0628C---32A42

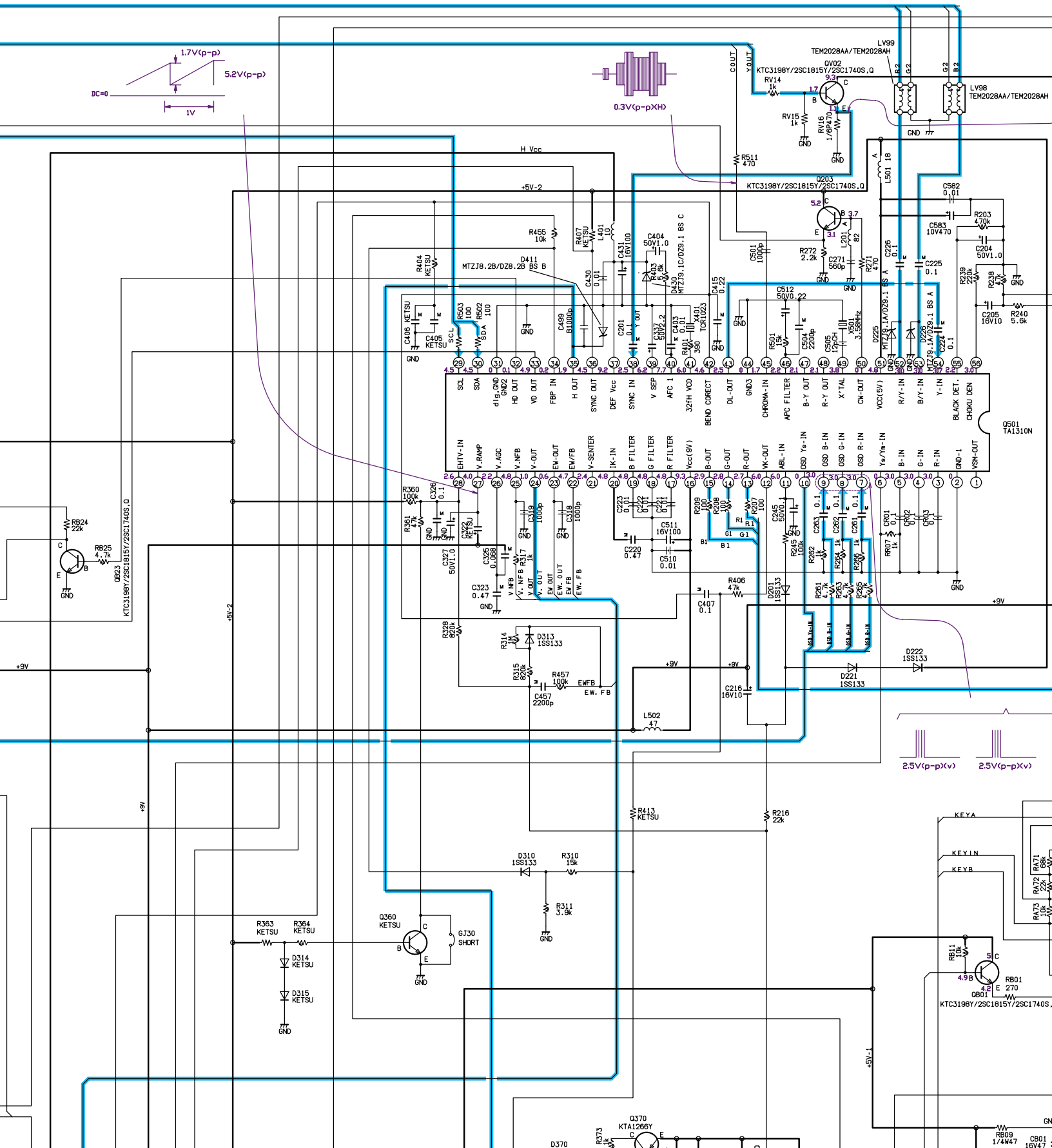
Undef±24			
Undef±23			
Undef±22			
Undef±21			
Undef±20			
Undef±19			
Undef±18			
Undef±17			
Undef±16			
Undef±15			
RS26	KETSU	6.8k	6.8k
RS25	KETSU	6.8k	6.8k
R460	4.7k	4.7k	5.6k
P603	KETSU	5PIN	5PIN
LV02	KETSU	TEM2028K	TEM2028K
L447	TLN3456AD/TLN3456AF	TLN3456AD/TLN3456AF	KETSU
GJ80	KETSU	KETSU	SHORT
DV27	KETSU	MTZJ9.1A	MTZJ9.1A
CV27	KETSU	50V0.1	50V0.1
CS50	KETSU	330p	330p
CS49	KETSU	330p	330p
CS26	KETSU	50V2.2	50V2.2
CS25	KETSU	50V2.2	50V2.2
C443	1500VH9100p	1500VH9100p	1500VH7800p
C442	315V0.56u	315V0.56u	315V0.62u
	32A32	32A42	36A42

× KETSU means to open the circuit.

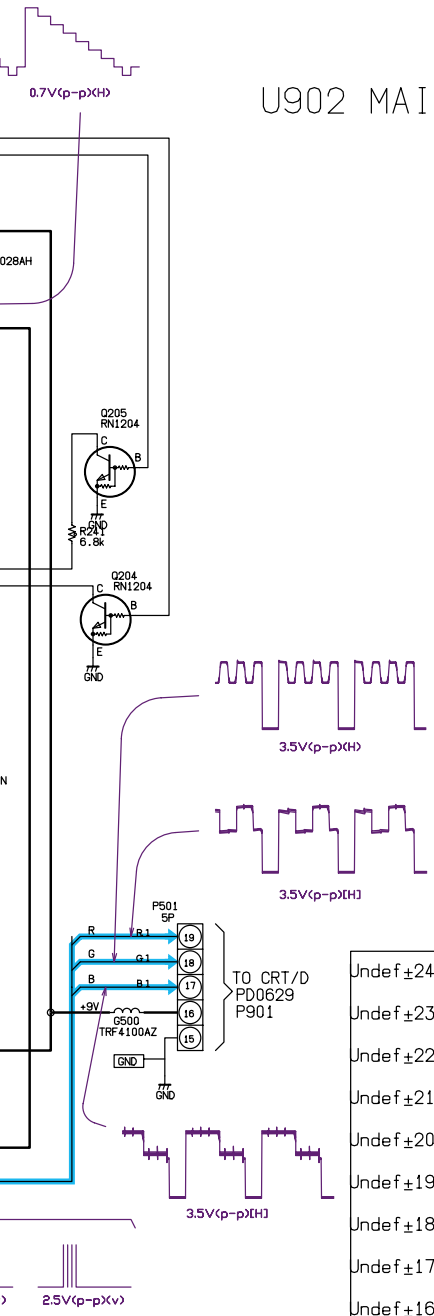
MAIN
32A32/32A42/36A42

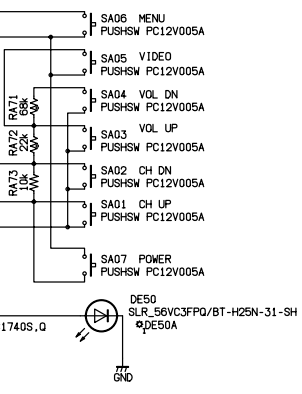

1
2
3
A
B
C
D
E
F
TO SPK
R-GND
R-OUT
L-GND
L-OUT
P601
4P
Q610
TA8265K
SOUND OUT
NF
IN (R)
GND
IN (L)
NF
FILTER
OUT (L)
VCC
GND
OUT (R)
H001 EL961L/EL971L
RF AGC
Vt
ADS
SCL
SDA
NC
+5V
+32V
NC
NC
+9V
MPX
GND
AFT
RF AGC
V-OUT
Q613
2SC2878-A
Q611
2SC2878-A
Q612
KTC3198Y/2SC1815Y/2SC1740S,Q
PV01
YKF51-5575
MV03
CON DIP 2P
TO MV03A
VIDEO-1
VIDEO-2
PV02
IJB56-TB
DV09
MTZJ9.1A/DZ9.1 BS A
QV01
MM1311BD
P603
KETSU
TO FRONT AV
PD0715
P604
MONITOR
OUT
(MON-OUT)
R
L/MONO
Cr
Cb
QV60
KTC3198Y/2SC1815Y/2SC1740S,Q
QS61
KTC3198Y/2SC1815Y/2SC1740S,Q
QS60
KTC3198Y/2SC1815Y/2SC1740S,Q
QZ06
KTC3198Y/2SC1815Y/2SC1740S,Q
QZ04
KTC3198Y/2SC1815Y/2SC1740S,Q
QS63
2SC2878
QS64
2SC2878
QS62
RN2204
1V(p-p)(H)
0.5V(p-p)

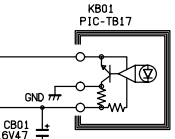

4
5
6
7
8
Q610A
HEAT SINK
GND
+19V
D603
KETSU
D604
KETSU
C677
63V0.1
R677
2.2
C683
25V1000
R-OUT
+19VGND
C663
16V10
GND
MV01A
MV01
MV01B
4P
G2
B2
G3
B3
+5V-2
CZ36
6.3V100
CZ15
100p
RZ31
KETSU
CZ50
50V0.47
CZ49
33p
CZ33
0.1
CZ37
0.01
RZ34
470k
CZ41
0.01
CZ42
6.3V100
CZ30
0.1
CZ39
0.1
CZ48
0.01
CZ43
180p
RZ75
820
CZ28
B1000p
CZ31
10p
CZ34
16V100
VREFL
VSS1
VDD1
VREFH
ADIN
B1AS1
CLAMPC
TEST1
1/2VDD
VFIL
CKIN
VDD2
VSS2
KILLER
VSS4
VDD4
VREF1
YOUT
B1AS2
COUT
B1AS3
VSS3
VDD3
CORING
1LLINE
VENH1
VENH0
CBPF
RZ61
8.2k
RZ35
10k
CZ45
0.1
CZ46
0.1
CZ47
0.1
CZ29
6.3V100
CZ38
KETSU
RZ64
KETSU
RZ65
1k
RZ66
1k
RZ68
1k
RZ67
KETSU
RZ69
KETSU
RZ62
10k
RZ63
10k
GND
LZ02
TEM2011Y/TEM2011AA
LZ03
TEM2011Y/TEM2011AA
RZ32
KETSU
RZ75
1k
CZ27
12p
CZ16
33p
QZ16
KETSU
CZ40
KETSU
RZ33
KETSU
XA01
TCR1056BM
QB41
KTC3198Y/2SC1815Y/2SC1740S,Q
RB47
3.3k
CB48
100p
CB41
KETSU
(R,G,B,Ys)
SDA,SCL
RB49
3.3k
RA33
1k
SCL
SDA
+5V-1
CA44
0.01
CM52
100p
CM58
0.1
CM51
0.1
LA01
10
CA42
16V10
CA43
0.01
RA40
100
RA41
100
RA42
100
RA43
100
DA42
MTZJ5.6B/D25.6 BS B
QZ21
KTA1266Y
QZ20
KTC3198Y/2SC1815Y/2SC1740S,Q
RZ60
1/6P1k
RZ05
1/6W100
RZ28
1k
RZ46
1k
CZ06
3p
RZ08
150
RZ06
1/6W100
LZ20
4.7
QZ05
KTA1266Y
RZ22
100
QZ14
KTA1266Y
RZ07
1/6W100
RZ71
10k
CZ04
180p
CZ05
62p
RZ45
22
RZ11
1k
QZ23
KTA1266Y
RZ13
3.9k
RZ49
1k
RZ44
1k
CZ09
01
LZ21
18
RZ15
150
CZ02
0.01
16V100
QZ08
KTA1266Y
RZ43
22
RZ14
12k
RZ12
1.8k
CZ96
2.7p
CZ58
56p
CZ57
180p
RZ10
1k
CZ08
0.1
GZ09
SHORT
RR91
KETSU
RR92
KETSU
RR90
KETSU
CA06
KETSU
CA05
KETSU
CA04
KETSU
CA03
KETSU
RR93
4.7k
HSYNC
LA02
KETSU
GJ01
SHORT
GJ02
SHORT
RST
CA32
0.01
RMT IN
CA08
KETSU
RA67
4.7k
RA68
4.7k
RA22
330
RA23
330
RA24
330
RA25
330
RA26
1k
RA27
1k
RA34
KETSU
RA35
1k
RA36
1k
RA37
330
RA38
330
CA37
100p
CA38
100p
QA01
TMP88CP38AN-****
QA01A
SHIELD CASE
R
G
B
Ys
H SYNC
V SYNC
OSC
OSC
GND
X'IN
X'OUT
RESET
SW IN
RMT IN
MAIN SYNC
SCL1
SDA1
GND
SEP IN SYNC
VIDEO IN
VDD
PIP VCHIP
SGA
SGV
KEY-B
KEY-A
KEY IN
AFT
AFC
SUB SYNC
SDA
SCL
DC-TR2
DC-TR1
LED
POWER
VCHIP
SP-MUTE
MUTE
RMT OUT
AV SW
GND
RA21
4.7k
RA18
1k
RA17
1k
RA16
1k
RA15
1k
CA13
KETSU
RA10
1k
RA09
1k
RA08
1k
RA07
1k
RA06
1k
RA04
1k
RA03
1k
RMT0
KEYB
KEYA
AFT IN
LED
RB42
D611
1SS133


1.7V(p-p)
5.2V(p-p)
DC=0
1V
0.3V(p-p)(H)
H Vcc
+5V-2
+9V
+5V-1
GND
Q501
TA1310N
SCL
SDA
dig GND
GND2
HD OUT
VD OUT
FBP IN
H OUT
SYNC OUT
DEF Vcc
SYNC IN
V SEP
AFC 1
32FH VCO
BEND CORECT
DL-OUT
GND3
CHROMA-IN
APC FILTER
B-Y OUT
R-Y OUT
X'TAL
CW-OUT
VCC(5V)
R/Y-IN
B/Y-IN
Y-IN
BLACK DET.
CHOKU DEN
EHTY-IN
V.RAMP
V.AGC
V.NFB
V-OUT
EW-OUT
EW/FB
V-SENTER
IK-IN
B FILTER
G FILTER
R FILTER
Vcc(9V)
B-OUT
G-OUT
R-OUT
VK-OUT
ABL-IN
OSD Ys-IN
OSD B-IN
OSD G-IN
OSD R-IN
Ys/Ym-IN
B-IN
G-IN
R-IN
GND-1
VSM-OUT
Q203
KTC3198Y/2SC1815Y/2SC1740S,Q
Q0I3
KTC3198Y/2SC1815Y/2SC1740S,Q
QV02
KTC3198Y/2SC1815Y/2SC1740S,Q
LV99
TEM2028AA/TEM2028AH
LV98
TEM2028AA/TEM2028AH
Q360
KETSU
GJ30
SHORT
Q370
KTA1266Y
QB01
KTC3198Y/2SC1815Y/2SC1740S,
D411
MTZJ8.2B/DZ8.2B BS B
D430
MTZ9.1C/DZ9.1 BS C
D225
MTZ9.1A/DZ9.1 BS A
D226
MTZ9.1A/DZ9.1 BS A
D313
1SS133
D310
1SS133
D314
KETSU
D315
KETSU
D201
1SS133
D222
1SS133
D221
1SS133
L501
18
L502
47
L401
10
X501
3.58MHz
2.5V(p-p)(v)
2.5V(p-p)(v)
KEYA
KEYIN
KEYB

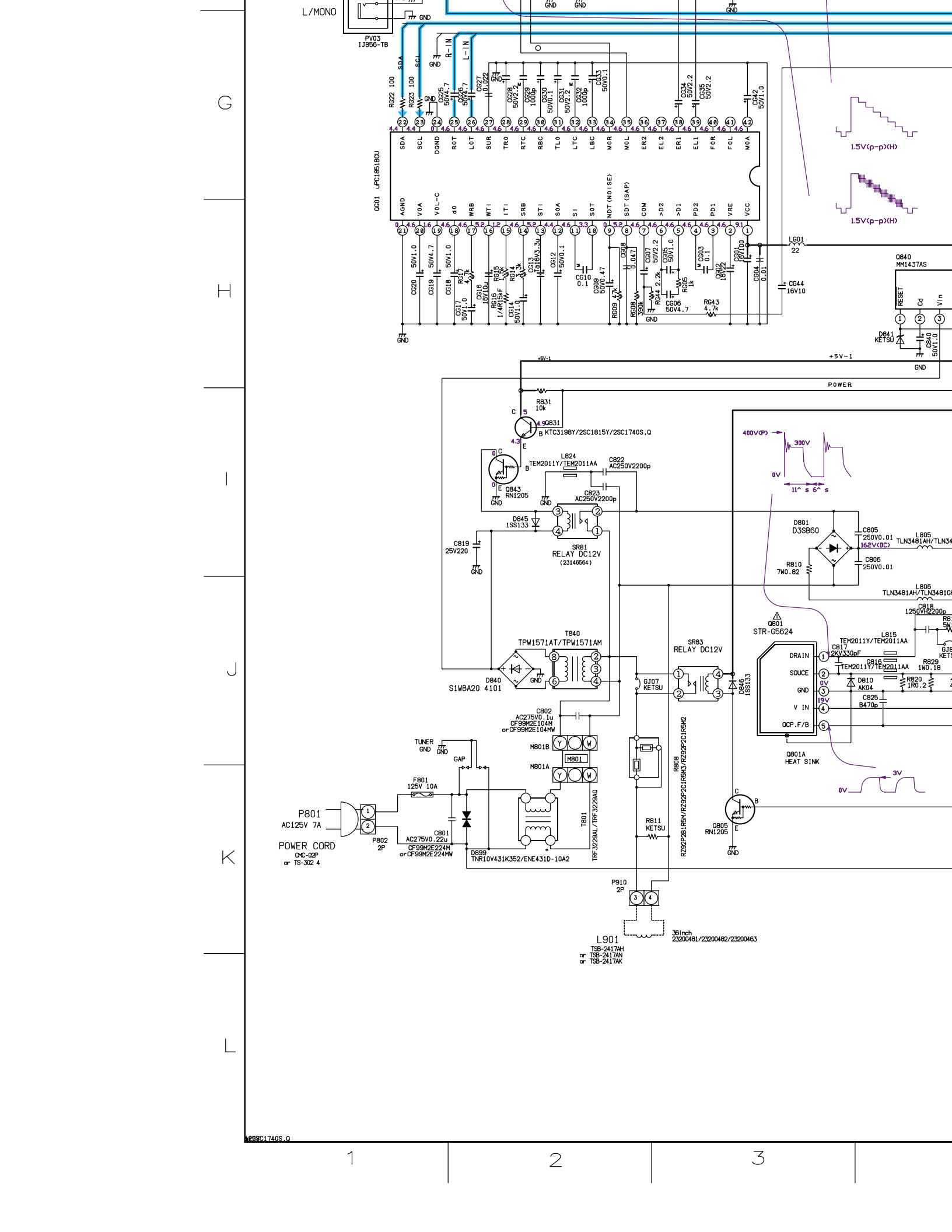
U902 MAIN UNIT PD0628A---32A32
PD0628B---36A42
PD0628C---32A42

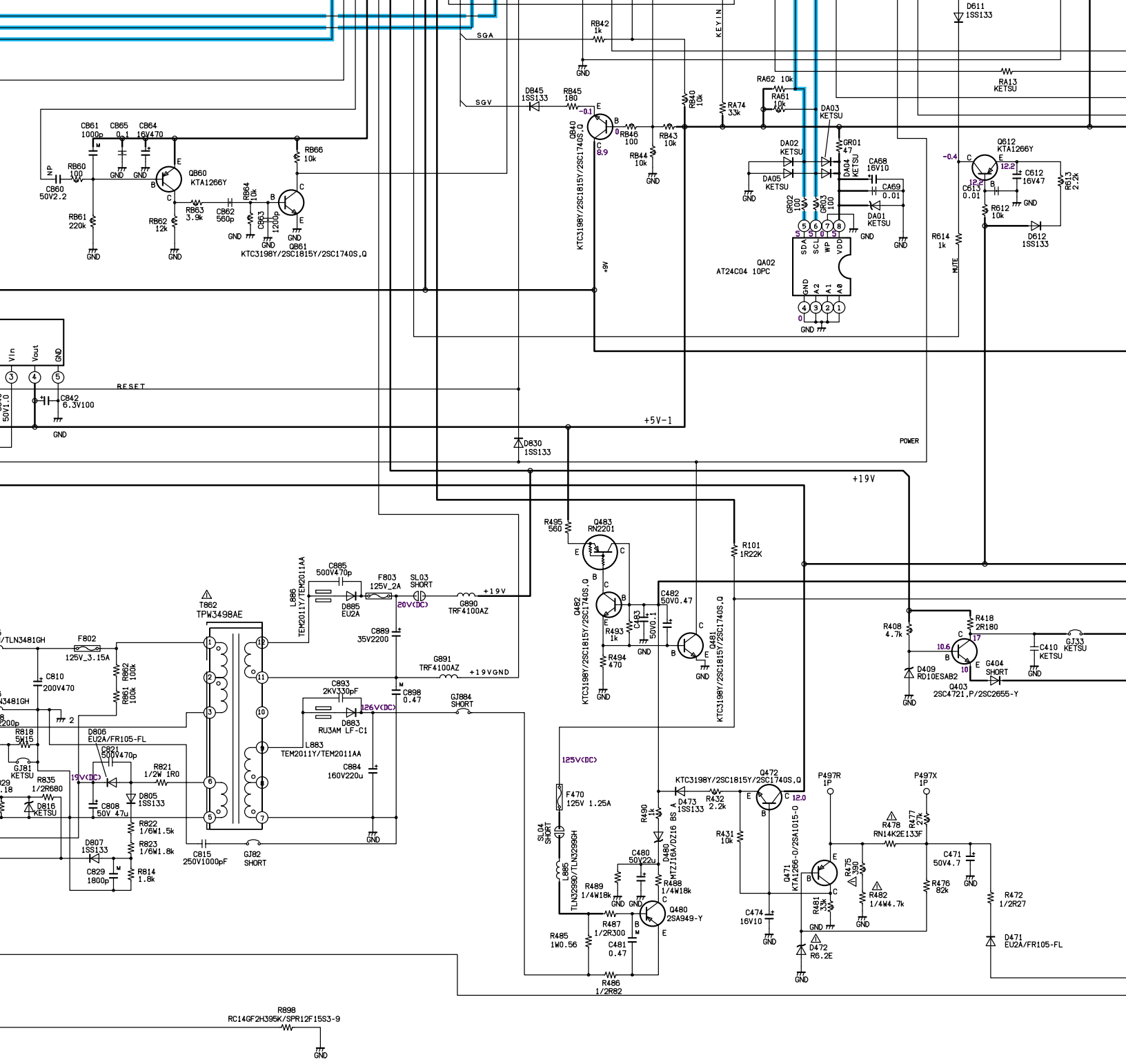


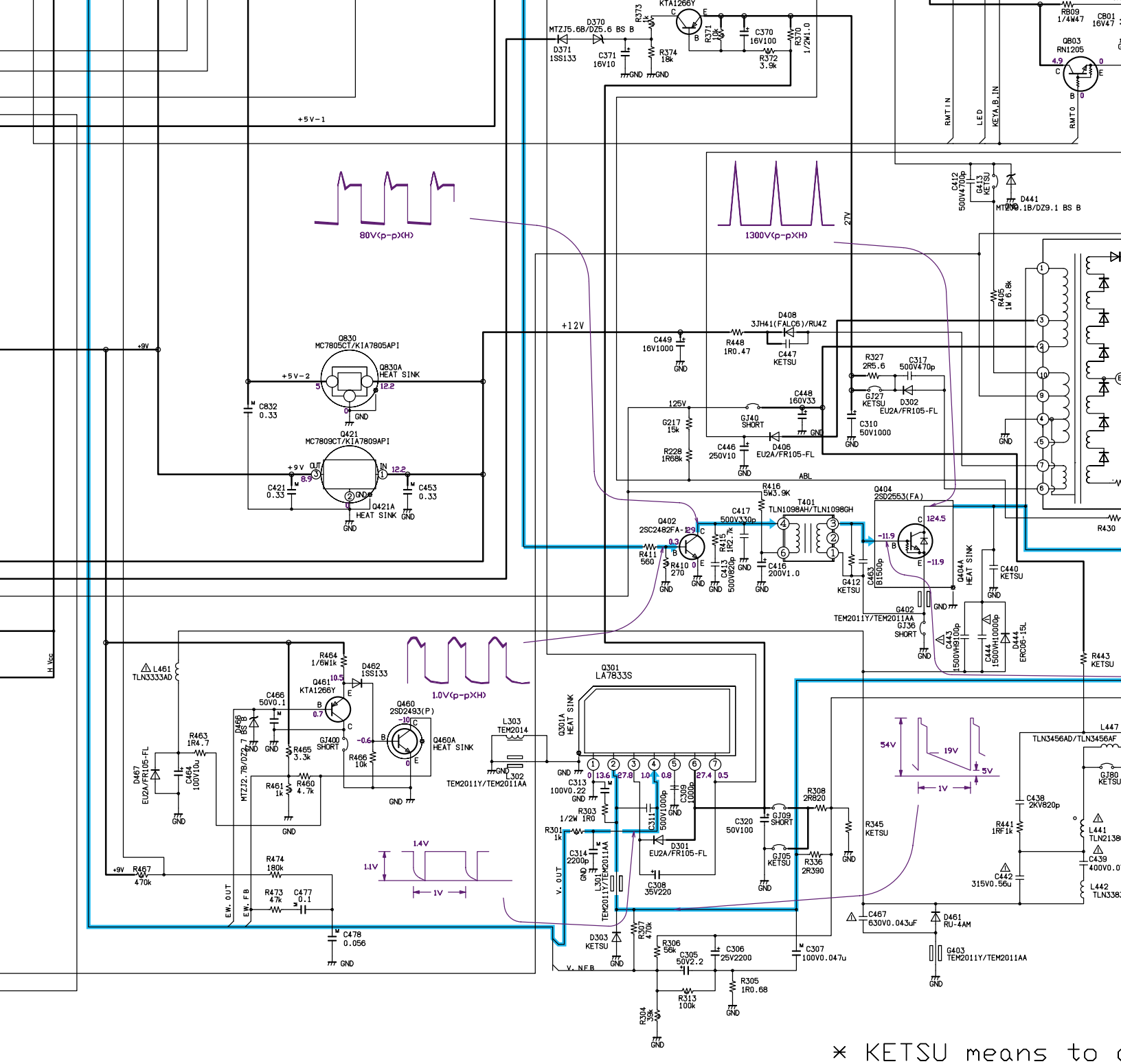




Undef±24			
Undef±23			
Undef±22			
Undef±21			
Undef±20			
Undef±19			
Undef±18			
Undef±17			
Undef±16			
Undef±15			
RS26	KETSU	6.8k	6.8k
RS25	KETSU	6.8k	6.8k
R460	4.7k	4.7k	5.6k
P603	KETSU	5PIN	5PIN
LV02	KETSU	TEM2028K	TEM2028K
L447	TLN3456AD/TLN3456AF	TLN3456AD/TLN3456AF	KETSU
GJ80	KETSU	KETSU	SHORT
DV27	KETSU	MTZJ9.1A	MTZJ9.1A
CV27	KETSU	50V0.1	50V0.1
CS50	KETSU	330p	330p
CS49	KETSU	330p	330p
CS26	KETSU	50V2.2	50V2.2

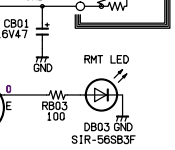

L/MONO
PV03
IJB56-TB
SDA
SCL
R-IN
L-IN
RG22 100
RG23 100
CG25 50V4.7
CG26 50V4.7
CG27 0.022
CG28 50V2.2
CG29 1000p
CG30 50V0.1
CG31 50V2.2
CG32 1000p
CG33 50V0.1
CG34 50V2.2
CG35 50V2.2
CG42 50V1.0
QG01 uPC1851BCU
SDA SCL DGND ROT LOT SUR TRO RTC RBC TLO LTC LBC MOR MOL ER2 EL2 ER1 EL1 FOR FOL MOA
AGND VOA VOL-C dO WRB WTI ITI SRB STI SOA SI SOT NDT(NOISE) SDT(SAP) COM >D2 >D1 PD2 PD1 VRE VCC
1.5V(p-p)(H)
1.5V(p-p)(H)
LG01
22
CG44
16V10
Q840
MM1437AS
RESET
Cd
Vin
D841
KETSU
C840
50V1.0
GND
+5V-1
POWER
R831
10k
Q831
KTC3198Y/2SC1815Y/2SC1740S,Q
Q843
RN1205
L824
TEM2011Y/TEM2011AA
C822
AC250V2200p
C823
AC250V2200p
D845
1SS133
SR81
RELAY DC12V
(23146564)
C819
25V220
400V(P)
300V
0V
11^ s 6^ s
D801
D3SB60
C805
250V0.01
162V(DC)
L805
TLN3481AH/TLN34
C806
250V0.01
R810
7W0.82
L806
TLN3481AH/TLN3481G
C818
1250V2200p
Q801
STR-G5624
T840
TPW1571AT/TPW1571AM
D840
S1WBA20 4101
SR83
RELAY DC12V
GJ07
KETSU
D846
1SS133
L815
TEM2011Y/TEM2011AA
C817
2KV330pF
DRAIN
SOUCE
GND
V IN
OCP.F/B
G816
TEM2011Y/TEM2011AA
D810
AK04
R820
1R0.2
R829
1W0.18
C825
B470p
Q801A
HEAT SINK
3V
0V
C802
AC275V0.1u
CF99M2E104M
or CF99M2E104MW
TUNER
GND
GAP
M801B
M801
M801A
F801
125V 10A
P801
AC125V 7A
POWER CORD
CMC-02P
or TS-302 4
P802
2P
C801
AC275V0.22u
CF99M2E224M
or CF99M2E224MW
D899
TNR10V431K352/ENE431D-10A2
T801
TRF3229AL/TRF3229AQ
R808
RZ92P2B1R5M/RZ92P2C1R5MJ/RZ92P2C1R5MJ
R811
KETSU
Q805
RN1205
P910
2P
L901
TSB-2417AH
or TSB-2417AN
or TSB-2417AK
36inch
23200481/23200482/23200463
2SC1740S,Q

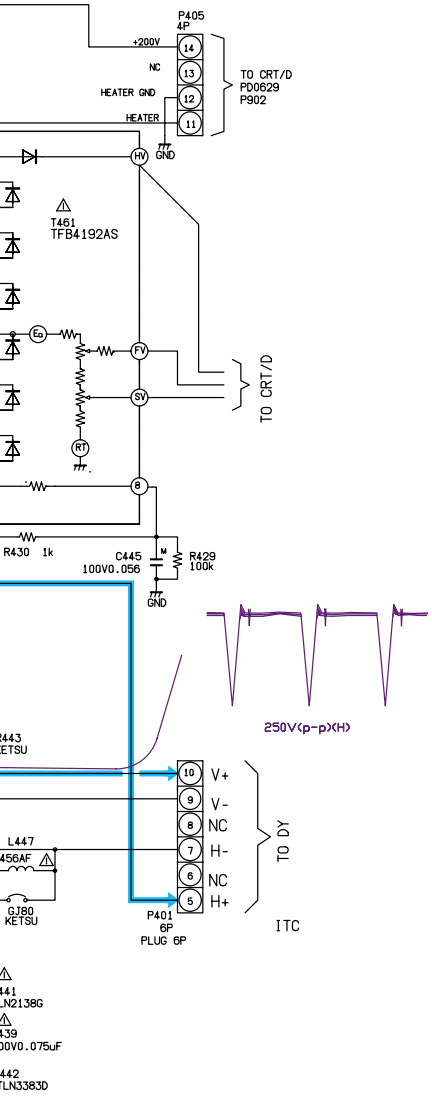

SGA
SGV
KEY IN
RB42 1k
RB45 180
RB40 10k
RB46 100
RB43 10k
RB44 10k
RA74 33k
RA62 10k
RA61 10k
RA13 KETSU
DA03 KETSU
DA02 KETSU
DA05 KETSU
DA04 KETSU
DA01 KETSU
GR01 47
GR02 100
GR03 100
CA68 16V10
CA69 0.01
QA02 AT24C04 10PC
SDA SCL WP VDD
GND A2 A1 A0
Q612 KTA1266Y
C612 16V47
C613 0.01
R612 10k
R613 2.2k
R614 1k
D612 1SS133
MUTE
D611 1SS133
CB61 1000p
CB65 0.1
CB64 16V470
CB60 50V2.2
RB60 100
RB61 220k
RB62 12k
RB63 3.9k
CB62 560p
CB63 1200p
RB64 10k
RB66 10k
QB60 KTA1266Y
QB61 KTC3198Y/2SC1815Y/2SC1740S,Q
KTC3198Y/2SC1815Y/2SC1740S,Q
+9V
Vin Vout GND
RESET
C842 6.3V100
+5V-1
D830 1SS133
POWER
+19V
R495 560
Q483 RN2201
R101 1R22K
Q482 KTC3198Y/2SC1815Y/2SC1740S,Q
C482 50V0.47
C483 50V0.1
R493 1k
R494 470
Q481 KTC3198Y/2SC1815Y/2SC1740S,Q
R408 4.7k
R418 2R180
C410 KETSU
GJ33 KETSU
D409 RD10ESAB2
G404 SHORT
Q403 2SC4721,P/2SC2655-Y
T862 TPW3498AE
L886 TEM2011Y/TEM2011AA
C885 500V470p
D885 EU2A
F803 125V_2A
SL03 SHORT
G890 TRF4100AZ
20V(DC)
C889 35V2200
G891 TRF4100AZ
+19VGND
C893 2KV330pF
D883 RU3AM LF-C1
126V(DC)
GJ884 SHORT
L883 TEM2011Y/TEM2011AA
C884 160V220u
C898 0.47
F802 125V_3.15A
C810 200V470
R861 100k
R862 100k
D806 EU2A/FR105-FL
C821 500V470p
R821 1/2W 1R0
D805 1SS133
C808 50V 47u
R822 1/6W1.5k
R823 1/6W1.8k
R814 1.8k
D807 1SS133
C829 1800p
C815 250V1000pF
GJ82 SHORT
R818 5W15
GJ81 KETSU
R835 1/2R680
D816 KETSU
19V(DC)
125V(DC)
F470 125V 1.25A
SL04 SHORT
L885 TLN3299D/TLN3299GH
R490 1k
D473 1SS133
D480 MTZJ16A/DZ16 BS A
C480 50V22u
R489 1/4W18k
R488 1/4W18k
Q480 2SA949-Y
R487 1/2R300
C481 0.47
R485 1W0.56
R486 1/2R82
Q472 KTC3198Y/2SC1815Y/2SC1740S,Q
R432 2.2k
R431 10k
Q471 KTA1266-O/2SA1015-O
R481 33k
C474 16V10
D472 R6.2E
P497R 1P
P497X 1P
R478 RN14K2E133F
R477 27k
R475 390
R482 1/4W4.7k
R476 82k
C471 50V4.7
R472 1/2R27
D471 EU2A/FR105-FL
R898 RC14GF2H395K/SPR12F15S3-9



* KETSU means to

CS26	KETSU	50V2.2	50V2.2
CS25	KETSU	50V2.2	50V2.2
C443	1500VH9100p	1500VH9100p	1500VH7800p
C442	315V0.56u	315V0.56u	315V0.62u
	32A32	32A42	36A42





open the circuit.

MAIN
32A32/32A42/36A42

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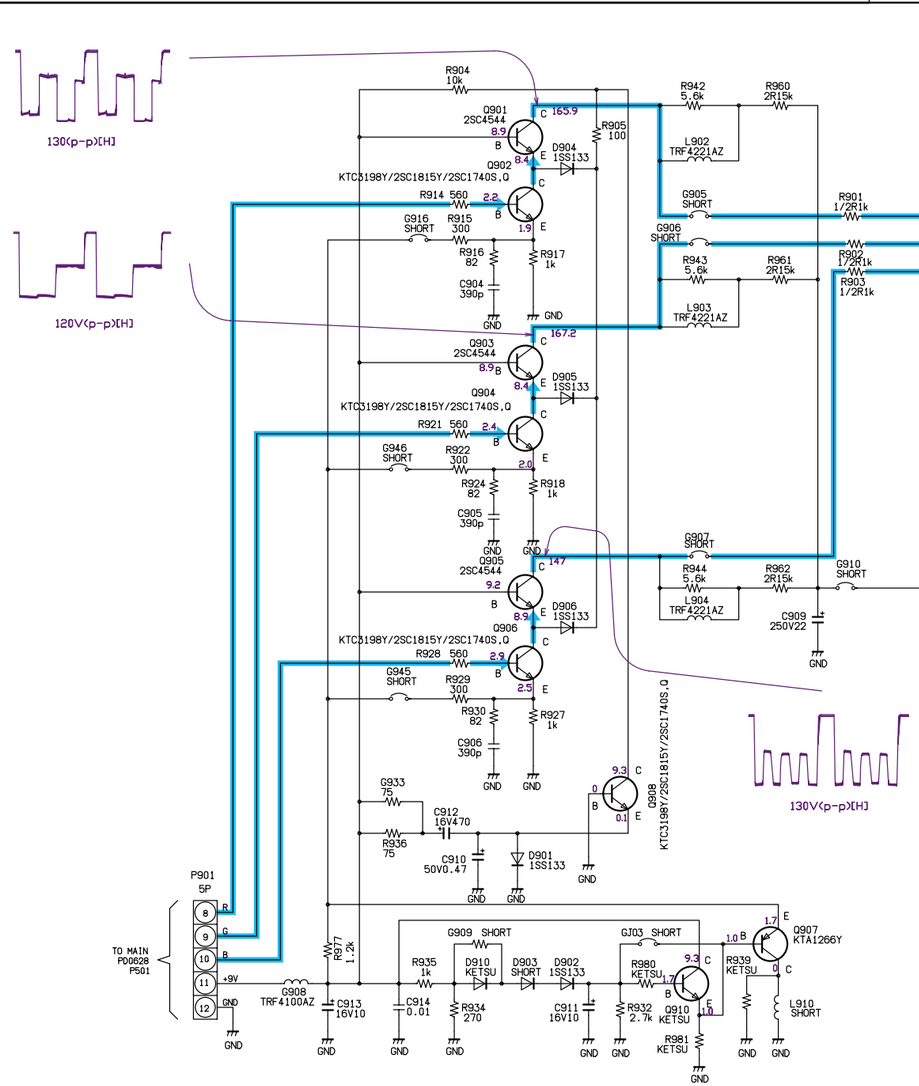
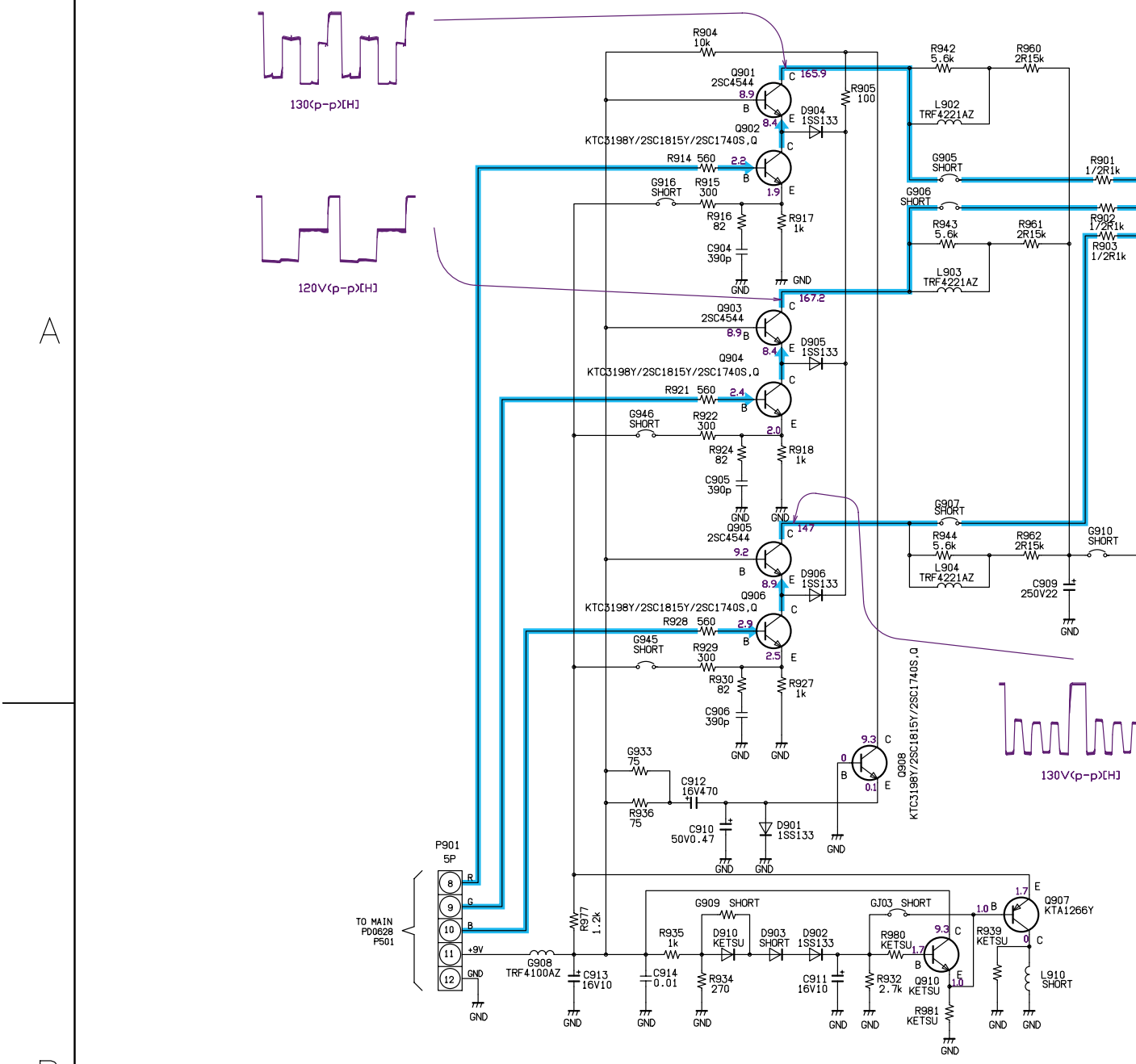
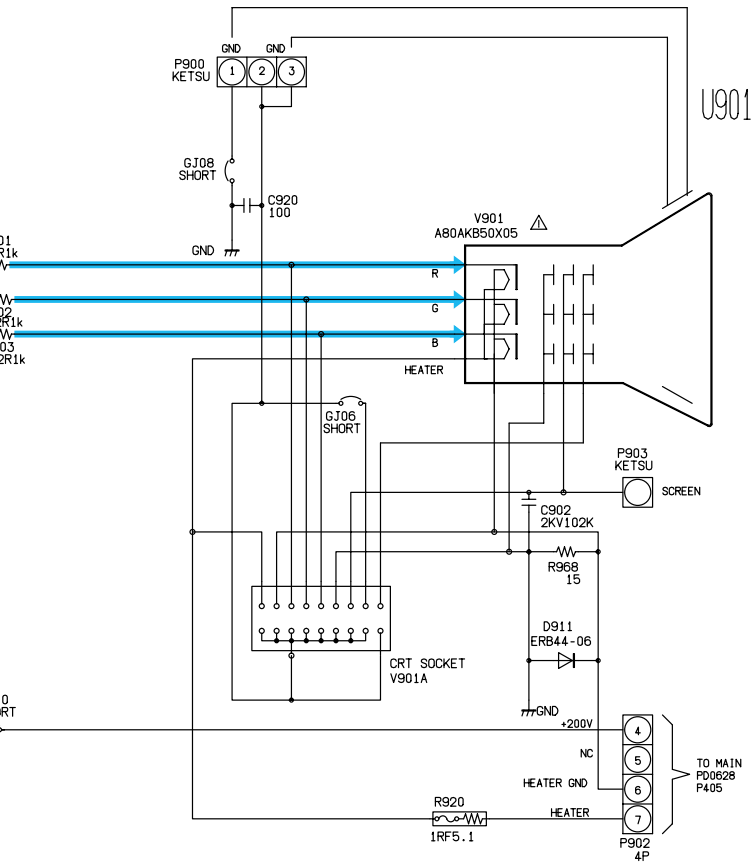


* KETSU means to open the circuit.

CRT-DRIVE
32A32/32A42/36A42


130(p-p)[H]
120V(p-p)[H]
R904 10k
Q901 2SC4544
R905 100
D904 1SS133
Q902 KTC3198Y/2SC1815Y/2SC1740S,Q
R914 560
G916 SHORT
R915 300
R916 82
R917 1k
C904 390p
GND
R942 5.6k
R960 2R15k
L902 TRF4221AZ
G905 SHORT
R901 1/2R1k
G906 SHORT
R902 1/2R1k
R943 5.6k
R961 2R15k
R903 1/2R1k
L903 TRF4221AZ
Q903 2SC4544
D905 1SS133
Q904 KTC3198Y/2SC1815Y/2SC1740S,Q
R921 560
G946 SHORT
R922 300
R924 82
R918 1k
C905 390p
G907 SHORT
Q905 2SC4544
R944 5.6k
R962 2R15k
G910 SHORT
L904 TRF4221AZ
C909 250V22
D906 1SS133
Q906 KTC3198Y/2SC1815Y/2SC1740S,Q
R928 560
G945 SHORT
R929 300
R930 82
R927 1k
C906 390p
Q908 KTC3198Y/2SC1815Y/2SC1740S,Q
130V(p-p)[H]
G933 75
R936 75
C912 16V470
C910 50V0.47
D901 1SS133
P901 5P
TO MAIN PD0628 P501
R
G
B
+9V
GND
G908 TRF4100AZ
R977 1.2k
C913 16V10
C914 0.01
R934 270
G909 SHORT
D910 KETSU
R935 1k
D903 SHORT
D902 1SS133
C911 16V10
GJ03 SHORT
R980 KETSU
R932 2.7k
Q910 KETSU
R981 KETSU
Q907 KTA1266Y
R939 KETSU
L910 SHORT



U901 CRT.D UNIT PD0629A(32A32/32A42/36A42)

A

B

* KETSU means to open the circuit.

CRT-DRIVE
32A32/32A42/36A42